

Abstract of the Disclosure

An apparatus for cutting large horizontal slabs of green or uncured concrete, such as roadways, with a single downward motion. The apparatus broadly comprises a cutting head including a cutting element, a drive pulley, an outboard pulley, and a foot structure; a drive motor; and a moveable support carriage. The cutting element is a closed loop of diamond wire entrained about the drive and outboard pulleys, with the drive pulley being driven by the drive motor. The foot structure includes a channel-shaped foot structure having two horizontally-extending flanges that function to minimize spalling or chipping during cutting. The carriage movably supports the cutting head and the motor on inboard and outboard rolling elements, such as wheels or tracks, that allow for rolling movement over and along the concrete slab. The carriage also allows for lowering and raising the cutting element to engage and disengage the concrete slab during cutting.